

## Single Plane Solution

With a detailed analysis of the mass transport through membrane layers and its effect on different separation processes, this book provides a comprehensive look at the theoretical and practical aspects of membrane transport properties and functions. Basic equations for every membrane are provided to predict the mass transfer rate, the concentration distribution, the convective velocity, the separation efficiency, and the effect of chemical or biochemical reaction taking into account the heterogeneity of the membrane layer to help better understand the mechanisms of the separation processes. The reader will be able to describe membrane separation processes and the membrane reactors as well as choose the most suitable membrane structure for separation and for membrane reactor. Containing detailed discussion of the latest results in transport processes and separation processes, this book is essential for chemistry students and practitioners of chemical engineering and process engineering. Detailed survey of the theoretical and practical aspects of every membrane process with specific equations Practical examples discussed in detail with clear steps Will assist in planning and preparation of more efficient membrane structure separation

From the award-winning journalist and coach: a biography of “the ‘Rain Man’ of golf. It’s a character drama. It’s an underdog story” (Barry Morrow, Academy Award–winning screenwriter). Documentary now in production! In *The Feeling of Greatness*, second edition, golf coach Tim O’Connor updates his previous biography of the late great, Canadian golfer Moe Norman, who was famous for introducing the single plane golf swing. This edition includes new anecdotes about Moe both on and off the course by golfers, journalists, friends, and family, and offers a more in-depth portrait of the man and golfer, especially in the last years of his life. O’Connor shares with readers his personal and professional friendships with Moe along the way. Some twenty years later, from a distanced perspective, O’Connor sets the record straight about Norman, promotes his legacy as the legendary golfer he was, and reflects on life lessons learned from their association over the years. Praise for Moe Norman and *The Feeling of Greatness* “Only two players have ever owned their swings: Moe Norman and Ben Hogan.” —Tiger Woods “Well-written and meticulously researched.” —James McCarten, PGATour.com “Tim O’Connor has helped us better understand one of golf’s most intriguing and disturbing members.” —Hal Quinn, *The Financial Post*

*Finish to the Sky* brings the special golf relationship between Moe Norman and Greg Lavern to life. This allows the reader to join us while Moe developed my golf swing to his own likeness Moe Norman style. My book has made possible the proper direction from set-up to finish based on the true Moe Norman golf swing Moe won all his tournaments with which he passed on to myself. I have included Moe Norman's Final Secrets. There are three secrets in the book that we both held close to us for many years. The outstanding swing sequences of a dynamic Moe in 1963 and 1964 make these final secrets clear and straight forward. Every golfer can take something positive from this book and incorporate into your own natural golf swing. When you do the right things you will learn to flow and move like we do. *Finish to the Sky* will electrify your old golf shots into pin point accurate one's. Now you will have the same secrets the straightest ball striker in the world believed in for the purist results.

Distills key concepts from linear algebra, geometry, matrices, calculus, optimization, probability and statistics that are used in machine learning.

Orbital Mechanics for Engineering Students, Second Edition, provides an introduction to the basic concepts of space mechanics. These include vector kinematics in three dimensions; Newton's laws of motion and gravitation; relative motion; the vector-based solution of the classical two-body problem; derivation of Kepler's equations; orbits in three dimensions; preliminary orbit determination; and orbital maneuvers. The book also covers relative motion and the two-impulse rendezvous problem; interplanetary mission design using patched conics; rigid-body dynamics used to characterize the attitude of a space vehicle; satellite attitude dynamics; and the characteristics and design of multi-stage launch vehicles. Each chapter begins with an outline of key concepts and concludes with problems that are based on the material covered. This text is written for undergraduates who are studying orbital mechanics for the first time and have completed courses in physics, dynamics, and mathematics, including differential equations and applied linear algebra. Graduate students, researchers, and experienced practitioners will also find useful review materials in the book. NEW: Reorganized and improved discussions of coordinate systems, new discussion on perturbations and quaternions NEW: Increased coverage of attitude dynamics, including new Matlab algorithms and examples in chapter 10 New examples and homework problems

A vital resource for pilots, instructors, and students, from the most trusted source of aeronautic information.

Celebrate the thirtieth anniversary of the Newbery Honor-winning survival novel Hatchet with a pocket-sized edition perfect for travelers to take along on their own adventures. This special anniversary edition includes a new introduction and commentary by author Gary Paulsen, pen-and-ink illustrations by Drew Willis, and a water resistant cover. Hatchet has also been nominated as one of America's best-loved novels by PBS's The Great American Read. Thirteen-year-old Brian Robeson, haunted by his secret knowledge of his mother's infidelity, is traveling by single-engine plane to visit his father for the first time since the divorce. When the plane crashes, killing the pilot, the sole survivor is Brian. He is alone in the Canadian wilderness with nothing but his clothing, a tattered windbreaker, and the hatchet his mother had given him as a present. At first consumed by despair and self-pity, Brian slowly learns survival skills—how to make a shelter for himself, how to hunt and fish and forage for food, how to make a fire—and even finds the courage to start over from scratch when a tornado ravages his campsite. When Brian is finally rescued after fifty-four days in the wild, he emerges from his ordeal with new patience and maturity, and a greater understanding of himself and his parents.

MATHEMATICS FOR ELEMENTARY SCHOOL TEACHERS, 6E offers future teachers a comprehensive mathematics course designed to foster concept development through examples, investigations, and explorations. In this text, intended for the one- or two-semester course required of Education majors, Bassarear demonstrates that there are many paths to solving a problem, and sometimes problems have more than one solution. The author presents real-world problems—problems that require active learning in a method similar to how archaeologists explore an archaeological find:

they carefully uncover the site, slowly revealing more and more of the structure. Visual icons throughout the main text allow instructors to easily connect content to the hands-on activities in the corresponding Explorations Manual. With this exposure, future teachers will be better able to assess student needs using diverse approaches. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Introduction to Sports Biomechanics has been developed to introduce you to the core topics covered in the first two years of your degree. It will give you a sound grounding in both the theoretical and practical aspects of the subject. Part One covers the anatomical and mechanical foundations of biomechanics and Part Two concentrates on the measuring techniques which sports biomechanists use to study the movements of the sports performer. In addition, the book is highly illustrated with line drawings and photographs which help to reinforce explanations and examples.

Signals and Systems Using MATLAB, Third Edition, features a pedagogically rich and accessible approach to what can commonly be a mathematically dry subject. Historical notes and common mistakes combined with applications in controls, communications and signal processing help students understand and appreciate the usefulness of the techniques described in the text. This new edition features more end-of-chapter problems, new content on two-dimensional signal processing, and discussions on the state-of-the-art in signal processing. Introduces both continuous and discrete systems early, then studies each (separately) in-depth Contains an extensive set of worked examples and homework assignments, with applications for controls, communications, and signal processing Begins with a review on all the background math necessary to study the subject Includes MATLAB® applications in every chapter

Applied Solid Dynamics covers the dynamics of solids and, in particular, some of its applications to modern systems. The book aims to help students bridge the gap between theoretical knowledge and practical application. Chapter 1 formulates the concept of dynamically equivalent systems, the use of which enables even the most complex of systems to be represented by a much simpler model, provided certain important criteria are met. Chapter 2 demonstrates the usefulness of this concept by introducing an innovative vector system for the analysis of epicyclic gear transmission.

Chapter 3 investigates the dynamics of a solid body in general plane motion, and Chapter 4 demonstrates the effect of intermittent energy transfer in a reciprocating system by using turning moment diagrams and the flywheel design. The applications of friction; the problems associated with rotational out-of-balance; and the dynamics of general space motion are tackled in the next four chapters. Chapters 9-12 discuss the analysis and prediction of the vibrating response of mass and elastic systems, whether such systems are single- or multi-degree of freedom in nature or are modeled in terms of lumped to distributed parameters. The book concludes by apprising active and passive vibratory control. Mechanical engineers will find this book invaluable.

Presents instructions on using MySQL, covering such topics as installation, querying, user management, security, and backups and recovery.

A manager's guide to improving both morale and the bottom line argues that good managers are experts at coaching--giving positive feedback--and shows readers a plan for becoming a better coach on the job.

University Physics is designed for the two- or three-semester calculus-based physics course. The text has been developed to meet the scope and sequence of most university physics courses and provides a foundation for a career in mathematics, science, or engineering. The book provides an important opportunity for students to learn the core concepts of physics and understand how those concepts apply to their lives and to the world around them. Due to the comprehensive nature of the material, we are offering the book in three volumes for flexibility and efficiency. Coverage and Scope Our University Physics textbook adheres to the scope and sequence of most two- and three-semester physics courses nationwide. We have worked to make physics interesting and accessible to students while maintaining the mathematical rigor inherent in the subject. With this objective in mind, the content of this textbook has been developed and arranged to provide a logical progression from fundamental to more advanced concepts, building upon what students have already learned and emphasizing connections between topics and between theory and applications. The goal of each section is to enable students not just to recognize concepts, but to work with them in ways that will be useful in later courses and future careers. The organization and pedagogical features were developed and vetted with feedback from science educators dedicated to the project. VOLUME III Unit 1: Optics Chapter 1: The Nature of Light Chapter 2: Geometric Optics and Image Formation Chapter 3: Interference Chapter 4: Diffraction Unit 2: Modern Physics Chapter 5: Relativity Chapter 6: Photons and Matter Waves Chapter 7: Quantum Mechanics Chapter 8: Atomic Structure Chapter 9: Condensed Matter Physics Chapter 10: Nuclear Physics Chapter 11: Particle Physics and Cosmology

Discover a simple, direct approach that highlights the basics you need within A FIRST COURSE IN THE FINITE ELEMENT METHOD, 6E. This unique book is written so both undergraduate and graduate readers can easily comprehend the content without the usual prerequisites, such as structural analysis. The book is written primarily as a basic learning tool for those studying civil and mechanical engineering who are primarily interested in stress analysis and heat transfer. The text offers ideal preparation for utilizing the finite element method as a tool to solve practical physical problems. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

“Through this wonderful book, frustrated golfers can learn to swing like Moe [Norman] and improve their games.”  
—Anthony Robbins, #1 New York Times–bestselling author The mysterious and reclusive genius Moe Norman is

acknowledged as the best ball-striker in the history of golf by many of the game's greats. *The Single Plane Golf Swing: Play Better Golf the Moe Norman Way* reveals the secrets of the swing that enabled him to hit the ball solidly with unerring accuracy and consistency—every time. Norman's simple, efficient, and easily understood Single Plane Swing has improved the games of thousands of golfers. Golf professional Todd Graves, known as "Little Moe" and regarded as the world authority on Norman's swing, comprehensively teaches readers the mechanics, drills, and feelings of the Single Plane Swing that Moe called "The Feeling of Greatness." Graves shares Norman's brilliant insights and liberating approach to the game and demonstrates why the conventional "tour" swing is too complex and frustrating for the majority of amateurs. Illustrated with more than 300 photographs and written with Tim O'Connor, Norman's biographer, the book also engagingly tells Norman's bittersweet life story and explores the teacher-student bond forged between Norman and his protégé Graves. "One of golf's greatest untold stories, Moe Norman's life illustrated a simple and powerful truth: greatness is built from practicing the right swing in the right way. In this book, Todd Graves has given us a blueprint for that swing, for those practice habits, and most of all for a process that builds success." —Dan Coyle, New York Times-bestselling author of *The Culture Code*

"Jim Hardy is the most knowledgeable teacher in golf. This extraordinary book will be the most revolutionary instructional book since Ben Hogan's *Five Lessons*." --Peter Jacobsen, Seven-time PGA Tour event winner Voted one of "America's 50 Greatest Teachers" by Golf Digest and ranked in the "Top 100 Teachers" list of Golf magazine, Jim Hardy is a veritable scholar of swing. He's been fixing the swings of professional and amateur golfers since 1977, and in *The Plane Truth for Golfers*, he makes his groundbreaking concepts available to you for the first time. Hardy's revolutionary approach is simple: There are two sets of fundamentals to the swing, not one. There is the one-plane swing, for more athletic players, and the two-plane swing, suitable for players of all abilities. Understanding these concepts is crucial to your improvement, and Hardy breaks them down into easy-to-follow steps, complete with dozens of photographs.

**#1 NEW YORK TIMES BESTSELLER • OPRAH'S BOOK CLUB PICK • NATIONAL BOOK AWARD LONGLIST •** "An instant American classic and almost certainly the keynote nonfiction book of the American century thus far."—Dwight Garner, *The New York Times* The Pulitzer Prize-winning, bestselling author of *The Warmth of Other Suns* examines the unspoken caste system that has shaped America and shows how our lives today are still defined by a hierarchy of human divisions. **NAMED THE #1 NONFICTION BOOK OF THE YEAR BY TIME, ONE OF THE TEN BEST BOOKS OF THE YEAR BY People • The Washington Post • Publishers Weekly AND ONE OF THE BEST BOOKS OF THE YEAR BY The New York Times Book Review • O: The Oprah Magazine • NPR • Bloomberg • Christian Science Monitor • New York Post • The New York Public Library • Fortune • Smithsonian Magazine • Marie Claire • Town & Country • Slate •**

Library Journal • Kirkus Reviews • LibraryReads • PopMatters Winner of the Los Angeles Times Book Prize • National Book Critics Circle Award Finalist • Dayton Literary Peace Prize Finalist • PEN/John Kenneth Galbraith Award for Nonfiction Finalist • PEN/Jean Stein Book Award Longlist “As we go about our daily lives, caste is the wordless usher in a darkened theater, flashlight cast down in the aisles, guiding us to our assigned seats for a performance. The hierarchy of caste is not about feelings or morality. It is about power—which groups have it and which do not.” In this brilliant book, Isabel Wilkerson gives us a masterful portrait of an unseen phenomenon in America as she explores, through an immersive, deeply researched narrative and stories about real people, how America today and throughout its history has been shaped by a hidden caste system, a rigid hierarchy of human rankings. Beyond race, class, or other factors, there is a powerful caste system that influences people’s lives and behavior and the nation’s fate. Linking the caste systems of America, India, and Nazi Germany, Wilkerson explores eight pillars that underlie caste systems across civilizations, including divine will, bloodlines, stigma, and more. Using riveting stories about people—including Martin Luther King, Jr., baseball’s Satchel Paige, a single father and his toddler son, Wilkerson herself, and many others—she shows the ways that the insidious undertow of caste is experienced every day. She documents how the Nazis studied the racial systems in America to plan their out-cast of the Jews; she discusses why the cruel logic of caste requires that there be a bottom rung for those in the middle to measure themselves against; she writes about the surprising health costs of caste, in depression and life expectancy, and the effects of this hierarchy on our culture and politics. Finally, she points forward to ways America can move beyond the artificial and destructive separations of human divisions, toward hope in our common humanity. Beautifully written, original, and revealing, *Caste: The Origins of Our Discontents* is an eye-opening story of people and history, and a reexamination of what lies under the surface of ordinary lives and of American life today.

Version 6.0. An introductory course on differential equations aimed at engineers. The book covers first order ODEs, higher order linear ODEs, systems of ODEs, Fourier series and PDEs, eigenvalue problems, the Laplace transform, and power series methods. It has a detailed appendix on linear algebra. The book was developed and used to teach Math 286/285 at the University of Illinois at Urbana-Champaign, and in the decade since, it has been used in many classrooms, ranging from small community colleges to large public research universities. See <https://www.jirka.org/diffyqs/> for more information, updates, errata, and a list of classroom adoptions.

Euclid was a mathematician from the Greek city of Alexandria who lived during the 4th and 3rd century B.C. and is often referred to as the "father of geometry." Within his foundational treatise "Elements," Euclid presents the results of earlier mathematicians and includes many of his own theories in a systematic, concise book that utilized a brief set of axioms

and meticulous proofs to solidify his deductions. In addition to its easily referenced geometry, "Elements" also includes number theory and other mathematical considerations. For centuries, this work was a primary textbook of mathematics, containing the only framework for geometry known by mathematicians until the development of "non-Euclidian" geometry in the late 19th century. The extent to which Euclid's "Elements" is of his own original authorship or borrowed from previous scholars is unknown, however despite this fact it was his collation of these basic mathematical principles for which most of the world would come to the study of geometry. Today, Euclid's "Elements" is acknowledged as one of the most influential mathematical texts in history. This volume includes all thirteen books of Euclid's "Elements," is printed on premium acid-free paper, and follows the translation of Thomas Heath.

This solid introduction uses the principles of physics and the tools of mathematics to approach fundamental questions of neuroscience.

A comprehensive introduction to the tools, techniques and applications of convex optimization.

"Witty, compelling, and just plain fun to read . . ." —Evelyn Lamb, *Scientific American* The Freakonomics of math—a math-world superstar unveils the hidden beauty and logic of the world and puts its power in our hands The math we learn in school can seem like a dull set of rules, laid down by the ancients and not to be questioned. In *How Not to Be Wrong*, Jordan Ellenberg shows us how terribly limiting this view is: Math isn't confined to abstract incidents that never occur in real life, but rather touches everything we do—the whole world is shot through with it. Math allows us to see the hidden structures underneath the messy and chaotic surface of our world. It's a science of not being wrong, hammered out by centuries of hard work and argument. Armed with the tools of mathematics, we can see through to the true meaning of information we take for granted: How early should you get to the airport? What does "public opinion" really represent? Why do tall parents have shorter children? Who really won Florida in 2000? And how likely are you, really, to develop cancer? *How Not to Be Wrong* presents the surprising revelations behind all of these questions and many more, using the mathematician's method of analyzing life and exposing the hard-won insights of the academic community to the layman—minus the jargon. Ellenberg chases mathematical threads through a vast range of time and space, from the everyday to the cosmic, encountering, among other things, baseball, Reaganomics, daring lottery schemes, Voltaire, the replicability crisis in psychology, Italian Renaissance painting, artificial languages, the development of non-Euclidean geometry, the coming obesity apocalypse, Antonin Scalia's views on crime and punishment, the psychology of slime molds, what Facebook can and can't figure out about you, and the existence of God. Ellenberg pulls from history as well as from the latest theoretical developments to provide those not trained in math with the knowledge they need. Math, as Ellenberg says, is "an atomic-powered prosthesis that you attach to your common sense, vastly multiplying its reach and strength." With the tools of mathematics in hand, you can understand the world in a deeper, more meaningful way. *How Not to Be Wrong* will show you how.

In the last few years, Algorithms for Convex Optimization have revolutionized algorithm design, both for discrete and continuous optimization problems. For problems like maximum flow, maximum matching, and submodular function minimization, the fastest algorithms involve essential methods such as gradient descent, mirror descent, interior point methods, and ellipsoid methods. The goal of this self-contained book is to enable researchers and professionals in computer science, data science, and machine learning to gain an in-depth understanding

of these algorithms. The text emphasizes how to derive key algorithms for convex optimization from first principles and how to establish precise running time bounds. This modern text explains the success of these algorithms in problems of discrete optimization, as well as how these methods have significantly pushed the state of the art of convex optimization itself.

Data Mining: Concepts and Techniques provides the concepts and techniques in processing gathered data or information, which will be used in various applications. Specifically, it explains data mining and the tools used in discovering knowledge from the collected data. This book is referred as the knowledge discovery from data (KDD). It focuses on the feasibility, usefulness, effectiveness, and scalability of techniques of large data sets. After describing data mining, this edition explains the methods of knowing, preprocessing, processing, and warehousing data. It then presents information about data warehouses, online analytical processing (OLAP), and data cube technology. Then, the methods involved in mining frequent patterns, associations, and correlations for large data sets are described. The book details the methods for data classification and introduces the concepts and methods for data clustering. The remaining chapters discuss the outlier detection and the trends, applications, and research frontiers in data mining. This book is intended for Computer Science students, application developers, business professionals, and researchers who seek information on data mining. Presents dozens of algorithms and implementation examples, all in pseudo-code and suitable for use in real-world, large-scale data mining projects Addresses advanced topics such as mining object-relational databases, spatial databases, multimedia databases, time-series databases, text databases, the World Wide Web, and applications in several fields Provides a comprehensive, practical look at the concepts and techniques you need to get the most out of your data

Susanna Epp's DISCRETE MATHEMATICS: AN INTRODUCTION TO MATHEMATICAL REASONING, provides the same clear introduction to discrete mathematics and mathematical reasoning as her highly acclaimed DISCRETE MATHEMATICS WITH APPLICATIONS, but in a compact form that focuses on core topics and omits certain applications usually taught in other courses. The book is appropriate for use in a discrete mathematics course that emphasizes essential topics or in a mathematics major or minor course that serves as a transition to abstract mathematical thinking. The ideas of discrete mathematics underlie and are essential to the science and technology of the computer age. This book offers a synergistic union of the major themes of discrete mathematics together with the reasoning that underlies mathematical thought. Renowned for her lucid, accessible prose, Epp explains complex, abstract concepts with clarity and precision, helping students develop the ability to think abstractly as they study each topic. In doing so, the book provides students with a strong foundation both for computer science and for other upper-level mathematics courses. Important Notice: Media content referenced within the product description or the product text may not be available in the ebook version.

Developed from celebrated Harvard statistics lectures, Introduction to Probability provides essential language and tools for understanding statistics, randomness, and uncertainty. The book explores a wide variety of applications and examples, ranging from coincidences and paradoxes to Google PageRank and Markov chain Monte Carlo (MCMC). Additional

From the bestselling author of Blink and The Tipping Point, Malcolm Gladwell's Outliers: The Story of Success overturns conventional wisdom about genius to show us what makes an ordinary person an extreme overachiever. Why do some people achieve so much more than others? Can they lie so far out of the ordinary? In this provocative and inspiring book, Malcolm Gladwell looks at everyone from rock stars to professional athletes, software billionaires to scientific geniuses, to show that the story of success is far more surprising, and far more fascinating, than we could ever have imagined. He reveals that it's as much about where we're from and what we do, as who we are - and that no one, not even a genius, ever makes it alone. Outliers will change the way you think about your own life story, and about what makes

us all unique. 'Gladwell is not only a brilliant storyteller; he can see what those stories tell us, the lessons they contain' Guardian 'Malcolm Gladwell is a global phenomenon ... he has a genius for making everything he writes seem like an impossible adventure' Observer 'He is the best kind of writer - the kind who makes you feel like you're a genius, rather than he's a genius' The Times

Diagnostic Ultrasound Imaging provides a unified description of the physical principles of ultrasound imaging, signal processing, systems and measurements. This comprehensive reference is a core resource for both graduate students and engineers in medical ultrasound research and design. With continuing rapid technological development of ultrasound in medical diagnosis, it is a critical subject for biomedical engineers, clinical and healthcare engineers and practitioners, medical physicists, and related professionals in the fields of signal and image processing. The book contains 17 new and updated chapters covering the fundamentals and latest advances in the area, and includes four appendices, 450 figures (60 available in color on the companion website), and almost 1,500 references. In addition to the continual influx of readers entering the field of ultrasound worldwide who need the broad grounding in the core technologies of ultrasound, this book provides those already working in these areas with clear and comprehensive expositions of these key new topics as well as introductions to state-of-the-art innovations in this field. Enables practicing engineers, students and clinical professionals to understand the essential physics and signal processing techniques behind modern imaging systems as well as introducing the latest developments that will shape medical ultrasound in the future Suitable for both newcomers and experienced readers, the practical, progressively organized applied approach is supported by hands-on MATLAB® code and worked examples that enable readers to understand the principles underlying diagnostic and therapeutic ultrasound Covers the new important developments in the use of medical ultrasound: elastography and high-intensity therapeutic ultrasound. Many new developments are comprehensively reviewed and explained, including aberration correction, acoustic measurements, acoustic radiation force imaging, alternate imaging architectures, bioeffects: diagnostic to therapeutic, Fourier transform imaging, multimode imaging, plane wave compounding, research platforms, synthetic aperture, vector Doppler, transient shear wave elastography, ultrafast imaging and Doppler, functional ultrasound and viscoelastic models

Building a masterpiece explores some of the untold chapters in the long history of the Opera House's gestation, development and completion -- of individuals whose careers were made or broken by the Opera House, the companies whose reputations were secured through their association with the building, and the pioneering construction methods, innovative technologies and methodologies developed to meet the demands of its unprecedented design and challenging construction. The workers who built the building, the politicians, architects and members of the public who championed it and its often beleaguered architect are discussed as is its current world status as a symbol of Australia. To coincide with the 40th anniversary of the opening of the Sydney Opera House, this new edition of Building a Masterpiece will include a new chapter on another little known and much misunderstood story: the architect who took over from Utzon and completed the project.

If your golf game has been plagued by inconsistency and less-than-peak performance, you may be going against your "natural swing". But you can improve your golf game dramatically and you can beat bad habits by drawing on talents you already possess. The Natural Golf Swing will: - introduce you to your natural balance and rhythm - let you play consistently to your potential - allow you to enjoy a repeating swing - help you increase power and control with every swing According to champion golfer George Knudson, your swing is governed by laws of nature, and is subject to logical, physical fundamentals that are all too often ignored. By learning the simple principles outlined in this book, you will generate more powerful, accurate swings, reduce your score, and gain control over your game. Take advantage of Knudson's more

than 30 years experience on the pro circuit as he guides you step-by-step through the mechanics of the natural swing, from the important first step of maintaining proper balance through the backswing, down-swing, and finishing form. Extensive illustrations and drills help to clarify each step. Knudsen also shares his experience as a golfer on the tour, offering valuable insights into the roles that temperament and concentration play in winning.

This updated and revised first-course textbook in applied probability provides a contemporary and lively post-calculus introduction to the subject of probability. The exposition reflects a desirable balance between fundamental theory and many applications involving a broad range of real problem scenarios. It is intended to appeal to a wide audience, including mathematics and statistics majors, prospective engineers and scientists, and those business and social science majors interested in the quantitative aspects of their disciplines. The textbook contains enough material for a year-long course, though many instructors will use it for a single term (one semester or one quarter). As such, three course syllabi with expanded course outlines are now available for download on the book's page on the Springer website. A one-term course would cover material in the core chapters (1-4), supplemented by selections from one or more of the remaining chapters on statistical inference (Ch. 5), Markov chains (Ch. 6), stochastic processes (Ch. 7), and signal processing (Ch. 8—available exclusively online and specifically designed for electrical and computer engineers, making the book suitable for a one-term class on random signals and noise). For a year-long course, core chapters (1-4) are accessible to those who have taken a year of univariate differential and integral calculus; matrix algebra, multivariate calculus, and engineering mathematics are needed for the latter, more advanced chapters. At the heart of the textbook's pedagogy are 1,100 applied exercises, ranging from straightforward to reasonably challenging, roughly 700 exercises in the first four "core" chapters alone—a self-contained textbook of problems introducing basic theoretical knowledge necessary for solving problems and illustrating how to solve the problems at hand – in R and MATLAB, including code so that students can create simulations. New to this edition • Updated and re-worked Recommended Coverage for instructors, detailing which courses should use the textbook and how to utilize different sections for various objectives and time constraints • Extended and revised instructions and solutions to problem sets • Overhaul of Section 7.7 on continuous-time Markov chains • Supplementary materials include three sample syllabi and updated solutions manuals for both instructors and students

An in-depth, full-color, step-by-step guide to the new golf swing that has taken the PGA Tour by storm The traditional golf swing requires a level of coordination that few golfers have. So it's no surprise that, despite huge advances in club and ball technology, the average golf handicap in America has dropped by only one stroke since 1990. Maverick golf instructors Michael Bennett and Andy Plummer spent a decade researching the swing, eventually combining physiology and physics to create a method they dubbed the "Stack and Tilt." The result? Big-name pros like Mike Weir, Tommy Armour III, and Aaron Baddeley are already converts, and Bennett and Plummer are now two of the most sought-after swing coaches in the game. Making these breakthroughs available to everyone, The Stack and Tilt Swing is a handsome, fully illustrated, complete course, packed with more than two hundred full-color photographs that make it easy for golfers at all levels to adopt this radical yet simple approach. Analyzing why the traditional swing won't work for most golfers, the authors explain the importance of keeping the upper body stacked over the lower body, while the spine tilts toward the target during the backswing, greatly reducing the inconsistencies created by the old-fashioned approach. Enhanced with practice routines, a troubleshooting list, test cases, and point-by-point assistance, this is the breakthrough guide to golf's hot new secret weapon.

[Copyright: 1af38ef448afbc2135f85989192d5775](https://www.springer.com/9781493998221)